

NOMENCLATURAL NOTES ON THE
AGRILINAE (BUPRESTIDAE). IV.

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ABSTRACT

Study of type specimens of Neotropical species of the subfamily Agrilinae in the museums of Prague, Paris, and London has revealed a number of necessary nomenclatural changes, both new synonymies and generic transfers, of species presently in or transferred to or from the following genera: *Agrilodia*, *Agrilus*, *Amorphosoma*, *Bakerettia*, *Brachys*, *Callimicra*, *Cyphothorax*, *Diodora*, *Dismorpha*, *Geralius*, *Hylaeogena*, *Leiopleura*, *Lius*, *Neotrachys*, *Omochyseus*, *Pachyschelus*, *Paragrilus*, *Sambomorpha*, *Stenogaster*, *Taphrocerus*, and *Trachys*.

During recent visits to examine type specimens of the Agrilinae in the collections of the museums in Prague, Paris, and London, and in earlier visits to London, many species have been found to be multiply described or incorrectly assigned to the genera in which they were originally described. Some of these synonymies and generic transfers have been published previously (Hespenheide 1973a, 1974a, 1974b), but examination of the types of Obenberger, Gory, Thomson, and Théry during these more recent visits has revealed more. Genera and species within genera are listed alphabetically. Preparations of several catalogues of Coleoptera, as well as revisionary studies of these genera by the author require publication of these nomenclatural changes, some of which affect North American species.

Agrilodia Obenberger, 1923

Agrilodia hirundo (Chevrolat), 1837, in Silbermann Rev. Entomol. 5:85. Synonyms: *A. pisciformis* (Chevrolat), 1837, loc. cit., **New Synonymy**; *Agrilus carus* Kerremans, 1897, Mem. Soc. Entomol. Belgique 6:57, **New Synonymy**.

The unique types of both of Chevrolat's species and of Kerremans's *carus* are in the British Museum, were compared directly, and were found to be the same species.

Agrilus Curtis, 1825

Agrilus angustus Chevrolat, 1835, Col. Mexique, Centurie 2, p. 137. Synonym: *A. subcarinellus* Thomson, 1878, Typi Bupr. Mus. Thomson., p. 89, **New Synonymy**.

The unique type of *subcarinellus* is at Paris. Two specimens in the British Museum bear handwritten labels "*angustus*, Chevr." and "Type," but only one bears a red type label. The type of *subcarinellus* is more greenish, differs in one small detail in the pubescent pattern on the elytra, and has the two medial depressions of the thorax connected, but is otherwise identical to a specimen collected by H. F. Howden in Vera Cruz, Mexico, which was compared with the type of *angustus*. For additional synonymy, see Hespenheide, 1974a.

Agrilus asperulus Waterhouse, 1889, Biol. Centrali-Americana, Coleoptera 3(1):101. Synonym: *A. exhuachucae* Knull, 1937, Ohio J. Sci. 37:305, **New Synonymy**.

A specimen in the Canadian National collection from Durango was compared with the unique type of *asperulus* in the British Museum and the type of Knull's *exhuachucae*, now at the Field Museum.

Agrilus atripennis Chevrolat, 1835, op. cit., p. 141. Synonym: *A. bicolorellus* Thomson, 1878, op. cit., p. 90, **New Synonymy**.

A specimen collected in Chiapas, Mexico, by H. F. Howden is identical to both types. The unique type of *atripennis*, without locality, is in the British Museum; that of *bicolorellus*, labelled "Mex.," is in the Paris museum.

Agrilus cephalotes Waterhouse, 1889, op. cit., p. 93. Synonyms: *A. jaczewskii* Obenberger, 1933, Sbornik Entomol. Odd. Nár. Mus. Praha 11:48, **New Synonymy**; *A. palimorosus* Obenberger, 1933, op. cit., p. 54, **New Synonymy**.

Differences in coloration likely account for the duplication of names for this species, the unique types of both Obenberger's names being in the collection at Prague (*jaczewskii*, numbered 25291; *palimorosus*, numbered 25295). Both are negligibly different from a specimen collected in Vera Cruz, Mexico, by G. H. Nelson and compared with the type of *cephalotes* (see Hesperheide, 1974a, for additional synonymy).

Agrilus chrysophanus Gory, 1841, Monogr. Bupr. IV, Suppl., p. 212. Synonym: *A. orizabae* Obenberger, 1932, Časopis Čs. Spol. Entomol. 29:160, **New Synonymy**.

A specimen from Vera Cruz collected by E. M. Fisher and D. S. Verity was compared with the two type specimens of *chrysophanus* in the Gory collection at Paris and the unique type of *orizabae*, no. 25270 at Prague, and found to represent the same species.

Agrilus corrugatus (Waterhouse), 1889, op. cit., p. 56. Synonyms: *A. associatulus* Obenberger, 1933, op. cit., p. 35, **New Synonymy**; *A. illigeri* Obenberger, 1933, op. cit., p. 16, **New Synonymy**; *A. mimulus* Obenberger, 1933, op. cit., p. 34, **New Synonymy**.

Variability in color of *corrugatus* is reflected in the number of names assigned to this species by Obenberger, all of whose types are in the Prague collection. That of *associatulus*, number 25214, is labelled "S. Durango"; of *illigeri*, number 24497, labelled "Mexico, Cordova"; of *mimulus*, number 24494, labelled "Mexico". All were compared with a specimen in the author's collection from Nayarit, Mexico, collected by A. R. Moldenke, which had been compared with type material of *Paradormorphus corrugatus* in the British Museum (see Hesperheide, 1974a, for discussion and additional synonymy).

Agrilus coxalis Waterhouse, 1889, op. cit., p. 89. Synonyms: *A. auroguttatus* Schaeffer, 1905, Bull. Brooklyn Inst. Mus. 1(7):149, **New Synonymy**; *A. socus* Obenberger, 1935, Sbornik Entomol. Odd. Nár. Mus., Praha 13:118, **New Synonymy**.

Five specimens in the British Museum bear Syntype labels and qualify as types of *coxalis*: two labelled "Juquila, Mexico, Salle Collection" and one each labelled "Cordova, Mexico, Hoege," "S. Geronimo, Guatemala, Champion," and "Capetillo, Guatemala, G. C. Champion." A female from Juquila bears the additional label "*Agrilus coxalis* (Type) Waterh." and is here designated the Lectotype; the other four specimens are considered paratypes. These and the unique type of *socus*, No. 24562 at Prague, were compared with a specimen from Chiapas collected by H. F. Howden and a specimen from Arizona in the Ohio State University collection determined by J. N. Knull as *auroguttatus*. Except for slight differences in the patterns of pubescence (the elytral spots of the Arizona specimen are noticeably larger than those of specimens from southern Mexico) and the shape of the prehumeral carina, all three names appear to refer to the same species.

Agrilus crapullellus Thompson, 1879, Typi. Bupr. Mus. Thomson., App. Ia, p. 71. Synonyms: *A. nigripennis* Waterhouse, 1889, op. cit., p. 96, **New Synonymy**; *A. prae-longus* Kerremans, 1897, op. cit., p. 115, **New Synonymy**; *A. heynei* Obenberger, 1917, Col. Rundschau 1917:36, **New Synonymy**; *A. schmidtii* Obenberger, 1939, Arb. Morph. Taxon. Entomol., Berlin-Dahlem 6:302, **New Synonymy**; *A. tenenbaumi* Obenberger, 1933, op. cit., p. 9, **New Synonymy**.

For additional synonymy, see Hesperheide, 1974a, under *nigripennis*. The type of *crapullellus* is small female labelled "Col." in the Paris museum. The type of

nigripennis was designated in Hesperheide, 1974a, and is in the British Museum; that of *praelongus*, also in the British Museum, a unique specimen labelled "Amazone, Stauding." The unique type of *tennenbaumi*, no. 25042 in the Obenberger collection at Prague is labelled "Mexico, Cordova." Three specimens numbered 25071, 25072, and 24073, also at Prague, labelled "La Caja, 8 km w San Jose, Costa Rica, Schmidt 1930" are the types of *schmidti*; a male numbered 25072, is designated as the Lectotype. All were compared with a specimen collected by me from *Cassia* sp. in central Panama.

Agrilus dentifer Waterhouse, 1889, op. cit., p. 74. Synonym: *A. ucalegon* Obenberger, 1935, op. cit., p. 136, **New Synonymy**.

A specimen from the Panama Canal Zone was compared with the unique type of *dentifer* at the British Museum and that of *ucalegon*, No. 24558, at Prague. The comparison shows the names to refer to the same species.

Agrilus dissimilis Waterhouse, 1889, op. cit., p. 123.

This species is listed by both Obenberger (1935) and Blackwelder (1944) under the genus *Paragrilus*. It was described by Waterhouse as an *Agrilus*, but with some doubt expressed as to its generic placement. It is in fact an *Agrilus*.

Agrilus divergens Thomson, 1878, op. cit., p. 84. Synonym: *A. nitidicollis* Waterhouse, 1889, op. cit., p. 79, **New Synonymy**.

The type of *divergens* in the Paris museum is a unique specimen bearing the label "Gua." Three specimens with the label "Coban, Vera Paz, Conradt." qualify as types of *nitidicollis*. One bears the additional label "*Agrilus nitidicollis* [male] (Type) Waterh." and is designated the Lectotype; a female bearing a similar label is designated the Lectoallotype. The third specimen is considered a paratype. Both types are identical to a specimen from Chiapas, Mexico, collected by H. F. Howden.

Agrilus emarginatus (Waterhouse), 1889, op. cit., p. 53. Synonym: *A. aegilips* Obenberger, 1935, op. cit., p. 115, **New Synonymy**.

A specimen from Nayarit, Mexico, is identical with the unique types of *Paradormorphus emarginatus* at the British Museum and the unnumbered type of *aegilips* at Prague.

Agrilus fosseicollis Thomson, 1879, op. cit., p. 71. Synonym: *A. aureoviridis* Waterhouse, 1889, op. cit., p. 118, **New Synonymy**.

The unique type of *fosseicollis* at Paris bears the conflicting labels "Mex." and "*fosseicollis* (Deyr.) Guatemala." It is identical to a specimen in the author's collection from Vera Cruz, Mexico, which has been compared with the type of *aureoviridis* (designated in Hesperheide 1974a; q.v. for additional synonymy).

Agrilus glabratus Waterhouse, 1889, op. cit., p. 115. Synonym: *A. nigrolaevigatus* Obenberger, 1935, op. cit., p. 132, **New Synonymy**.

Agrilus glabratus is represented in the Biologia Centrali-Americana collection at the British Museum by two specimens, both bearing the label "Coban, Vera Paz, Conradt." and blue Syntype labels. One bears the additional label "*Agrilus glabratus* (Type) Waterh." and is here designated the Lectotype; the other specimen is considered a paratype. The unique type of *nigrolaevigatus*, no. 25044 at Prague, was compared with an enlarged color photograph of the Lectotype of the distinctive *glabratus* and found to be identical.

Agrilus gracilipes Waterhouse, 1889, op. cit., p. 81. Synonym: *A. turrialbae* Obenberger, 1933, op. cit., p. 49, **New Synonymy**.

A specimen in the U.S. National Museum from Costa Rica was compared with both the Lectotype of *gracilipes* (Hesperheide 1974a; see also for additional synon-

ymy) and the unique type of *turrialbae*, No. 25293 at Prague. The comparison shows the names refer to the same species.

Agrilus hilaris Waterhouse, 1889, op. cit., p. 87. Synonym: *A. alferakii* Obenberger, 1932, Folia Zool. Hydrobiol. 4:258, **New Synonymy**.

Seven species in the British Museum qualify as types of *hilaris*. Two female specimens on a card bear the labels "Pantelõn, 1700 ft., Champion" and "*Agrilus hilaris* (Type) Waterh.;" the left-hand specimen is arbitrarily chosen as the Lectotype. The right-hand specimen and two other specimens with the same data are considered Paratypes. A male specimen with the data label "Panzos, Vera Paz. Conradt." is designated the Lecto-Allotype; two other specimens with the same data are considered Paratypes. The type of *alferakii*, number 25424 in the collection at Prague, has been heavily damaged by dermestids; four other specimens from Puerto Berrio, Columbia, determined by Obenberger as *alferakii* and also at Prague, and the remains of the type are the same species as a specimen from Oaxaca, Mexico, in the Canadian National Collection that has been compared with the type material of *hilaris*.

Agrilus impressicollis Gory, 1841, op. cit., p. 241. Synonym: *A. apicatus* Waterhouse, 1889, op. cit., p. 92, **New Synonymy**.

Eight specimens with the label "Duenas, Guatemala, G. C. Champion" qualify as the types of *apicatus*. Two females on a card bear the additional label "*Agrilus apicatus* (Type) W.;" the left-hand specimen is arbitrarily designated the Lectotype. The other specimens are considered paratypes. A specimen from Rio Verde, Jalisco, Mexico in the Collection of the American Museum is identical with specimens in the type series of *apicatus* and with the unique type of *impressicollis* in the Museum d'Histoire Naturelle in Paris.

Agrilus molestus Waterhouse, 1889, op. cit., p. 83. Synonym: *A. mencius* Obenberger, 1932, op. cit., p. 256, **New Synonymy**.

A specimen collected in the Panama Canal Zone by the author was compared with the unique types of both *molestus*, in the British Museum, and *mencius*, No. 25422, at Prague. These names refer to the same species.

Agrilus percarus Kerremans, 1894, Ann. Soc. Entomol. France, 64:418. Synonym: *A. kulagini* Obenberger, 1933, op. cit., p. 66, **New Synonymy**.

One of two specimens in the British Museum with the label "Mexique, Manuf. Tabacs" has been designated the Lectotype of *percarus*; a second specimen without head and thorax with the same label is considered a Paratype. The type of *kulagini* Obenb., numbered 25277 in the collection of the National Museum, Prague, and labelled "Costa Rica" is identical to a specimen from Tamazunchale, Mexico, in the Canadian National Collection that was also compared with the type of *percarus*.

Agrilus profugellus Thomsom, 1878, op. cit., p. 68. Synonym: *A. dimidiatus* subsp. *paulisto* Obenberger, 1933, op. cit., p. 66, **New Synonymy**.

Comparison of male and female specimens collected by V. N. Alin at São Paulo, Brasil, with the types of both names shows them to refer to the same species. This species is mimetically convergent with *A. dimidiatus* Waterhouse (Hespenheide, 1973b), but is unrelated to that species.

Agrilus quadrinotatus Gory, 1841, op. cit., p. 233. Synonyms: *A. korolkovi* Obenberger, 1932, op. cit., p. 241, **New Synonymy**; *A. novickii* Obenberger, 1933, op. cit., p. 34, **New Synonymy**.

The unique types of the species described by Obenberger are in his collection at Prague: *korolkovi* is labelled "Cuernavaca, Mexico" and numbered 25368; *novickii* is labelled "Mexico" and numbered 24493. The two specimens fall out in different parts of Obenberger's informal working key to the genus, the first couplet of which is the presence or absence of elytral pubescence; *quadrinotatus* is sexually dimorphic

for this character: males have inconspicuous or no elytral spots, whereas females have very distinct spots. A female in the Gory collection in Paris bears a "type" label and is considered the type of *quadrinotatus*. A male-female pair collected by D. S. Verity in the state of Mexico, Mexico, was compared with the types of all three names.

Agrilus scabiosus Thomson, 1878, op. cit., p. 88. Synonyms: *A. sopotskoi* Obenberger, 1932, op. cit., p. 260, **New Synonymy**; *A. tornoon* Obenberger, 1935, op. cit., p. 122, **New Synonymy**.

A specimen from Chiapas, Mexico, was compared with the unique types of *scabiosus* (Paris), *sopotskoi*, and *tornoon* (both at Prague, unnumbered). The comparison shows all three names refer to the same species.

Agrilus siren Gory, 1841, op. cit., p. 211. Synonym: *A. parens* Kerremans, 1897, op. cit., p. 58, **New Synonymy**.

A specimen from the Panama Canal Zone collected by H. P. Stockwell was compared with the unique types of both *siren* at Paris and *parens* at the British Museum. These names refer to the same distinctive species.

Agrilus splendidipodex Thomson, 1878, op. cit., p. 89, Synonym: *A. depressicollis* Kerremans, 1900, Ann. Soc. Entomol. Belgique 44:328, **New Synonymy**.

The unique male type of *splendidipodex* is in Paris and is labelled "mex."; that of *depressicollis* is in the British Museum and labelled "Guatemala, Jaeger." Both types are negligibly different from a specimen from El Salvador in the Canadian National Collection.

Agrilus stellatus Waterhouse, 1889, op. cit., p. 114. Synonym: *A. karavajevi* Obenberger, 1933, op. cit., p. 79, **New Synonymy**.

The unique type of *stellatus* is labelled "Chontales, Nicaragua, T. Belt" and is in the British Museum; that of *karavajevi*, labelled "Costa Rica" and numbered 25368, is at Prague. Both have been compared with a specimen from Sinaloa, Mexico, collected by D. S. Verity.

Agrilus subguttatus Waterhouse, 1889, op. cit., p. 84. Synonym: *A. boviei* Obenberger, 1933, op. cit., p. 26, **New Synonymy**.

The unique type of *boviei*, number 25062 in the collection at Prague, is identical with a specimen from Michoacan, Mexico, collected by D. S. Verity, which has also been compared with type material of *subguttatus* (See Hespeneide 1974a for Lectotype designation and additional synonymy). Genitalia of all three were identical.

Agrilus taeniatus Chevrolat, 1935, op. cit., p. 140. Synonym: *A. sapindicola* Vogt, 1949, Ann. Entomol. Soc. Amer. 42:50, **New Synonymy**.

Comparison of a male specimen of *sapindicola* from Hidalgo County, Texas, collected and determined by J. N. Knull, with the unique male type of *taeniatus* in the British Museum shows these two names to refer to the same species.

Agrilus trispinosus Gory, 1841, op. cit., p. 213. Synonym: *A. aciculatus* Waterhouse, 1889, op. cit., p. 71, **New Synonymy**.

The unique type of *trispinosus* at Paris is from Columbia, whereas that of *aciculatus* at the British Museum is from Mexico. Both were compared with a specimen from Guatemala in the Canadian National Collection. The Columbian specimen has the front of the head less deeply grooved and lacks a small spot of pubescence on the elytral margins beside the third sutural spot, but is otherwise identical.

Agrilus trypantiformis Fisher, 1929, Proc. U.S. Natl. Mus. 76(6):1. Synonym: *Agrilus zubowskyi* Obenberger, 1932, op. cit., p. 249, **New Synonymy**.

An enlarged, color photograph of the type of *trypantiformis*, at the U.S. National

Museum, was compared with the unnumbered unique type of *zubowskyi* at Prague and found to represent the same, very distinctive species. Both types are from Costa Rica.

Agrilus uvarovi Obenberger, 1933, op. cit., p. 57. Synonym: *A. schwartzi* Fisher, 1938, Sbornik Entomol. Odd. Nár. Mus., Praha 16:20, **New Synonymy**.

A specimen from the Panama Canal Zone was compared to the unique types of both *schwarzi*, at the U.S. National Museum, and *uvarovi*, No. 25328 at Prague. The type of *uvarovi* is a female with a purplish rather than a bluish thorax, and slightly larger white spots on the vertical portions of the abdominal segments, but is otherwise identical.

Agrilus wytsmani Obenberger, 1933, op. cit., p. 47. Synonym: *A. tonnoiri* Obenberger, 1933, op. cit., p. 50, **New Synonymy**.

The unique types of both *wytsmani* (No. 25290) and *tonnoiri* (No. 25296) are at Prague and were compared directly. They differ only in the color of the thorax, which is golden green in the type of *tonnoiri* and black in *wytsmani*.

Brachys Deyrolle, 1864

Brachys anthrenoides Waterhouse, 1889, op. cit., p. 132. Synonym: *B. costaricana* Obenberger, 1937, Folia Entomol., Brno 1:26, **New Synonymy**.

The type material of *anthrenoides* includes a number of specimens representing at least two distinct species. A card bearing a female specimen and the labels "Taboga Isl., Panama., Champion" and "*Brachys anthrenoides* (Type) Waterh." is here designated the Lectotype. A male bearing the Taboga Island label is designated the Allolectotype. Nine other specimens on four pins in the British Museum with the same label are considered paratypes, although ten specimens mounted with them are the second species and not considered paratypes. Material that can be considered paratypes has been seen in other collections, but is not enumerated here. A male specimen from the Panama Canal Zone in my collection was compared with the Allolectotype of *anthrenoides* and the unique type of *costaricana* and found to be the same species.

Brachys floccosa Mannerheim, 1837, Bull. Soc. Imp. Nat. Moscou 10(8):118. Synonym: *B. heroica* Obenberger, 1923, Entomol. Blätter 19:121, **New Synonymy**.

A specimen from Arizona collected by G. H. Nelson and identified by him as *floccosa* was compared with the unique type of *heroica* at Prague. The type of *heroica* is almost completely abraded of pubescence, but is recognizably the same species.

Brachys scapulosa Chevrolat, 1837, op. cit., p. 104. Synonym: *B. debilis* Kerremans, 1900, op. cit., p. 348, **New Synonymy**.

Two specimens in the British Museum bear syntype labels under the name *scapulosa*. A female with the labels "Type", "Mexico", and "*scapularis* Chevr." (sic) is designated the Lectotype. A male with only the label "Mexico" is designated an Allolectotype. Two specimens, also in the British Museum, bear the labels "Guatemala, Jaeger" and "*debilis* Kerr., Type"; the male is designated the Lectotype and the female is considered an Allolectotype. The types were compared directly and found to represent the same species.

Callimicra Deyrolle, 1864

Callimicra cylindera Kerremans, 1903, in Wytsman. Gen. Ins., fasc. 12:331. Synonym: *Bakerettia mrazi* Obenberger, 1922, Sbornik Entomol. Odd. Nár. Mus. Praha, 1:148, **New Synonymy**.

A specimen from Cipó in the State of Sao Paulo, Brasil, was compared with the

types of both names, that of *Bakerettia mrazi* at Prague and that of *Callimicra cylindera* at the British Museum. Cobos (1978) has recently discussed the placement of the genus *Bakerettia* and synonymized it with *Callimicra*.

Callimicra hoscheki Obenberger, 1922, Arch. f. Naturg., A. 88(12):163. Synonyms: *C. lucida* Waterhouse, 1889, op. cit., p. 165, not Gemminger & Harold, 1869, Cat. Coleopt. 5:1430, **New Synonymy**; *C. lucidula* Kerremans, 1903, loc. cit., not Kerremans, 1892, Mem. Soc. Entomol. Belgique 1:300. *C. loonae* Blackwelder, 1945, op. cit., p. 339, **New Synonymy**.

Two specimens, one in Prague labelled only "Costa Rica," and one in the Théry collection in Paris labelled "Turrialba, Costa Rica," bear "Typus" labels and labels written in Obenberger's hand indicating that they are types of *hoscheki*. Although the description of *hoscheki* mentions only Turrialba as a locality, both specimens were obviously considered by Obenberger to be types. Because all other neotropical Agrilinae are represented by type material in the Obenberger collection at Prague, it seems likely that Obenberger thought of his own material as the primary types. For this reason, the Prague specimen of *hoscheki* is designated here as the Lectotype, and the Paris specimen is considered a paralectotype. The type material of *lucida* Waterhouse is represented by ten specimens on six pins, each with the label "Bugaba, Panama, Champion." One of these bears the additional handwritten label "(*Callimicra lucida*) (Type) Waterh.)" and a red "Type, H.T." label and is considered the holotype. The other nine specimens are considered paratypes. Both sets of type material have been compared with a male specimen from central Panama in my collection and found to represent the same species. The nomenclatural confusion surrounding the Waterhouse species is thus both compounded and resolved, since *hoscheki* becomes a senior synonym to *loonae*, Blackwelder's attempt to resolve the matter.

Callimicra subcyanea Gory, 1841, op. cit., p. 280. Synonym: *C. obtusa* Waterhouse, 1889, op. cit., p. 164, **New Synonymy**.

Two specimens in Paris qualify as the type of *subcyanea* under the general locality "Columbie." A male was dissected and is here designated as the Lectotype; the second specimen is considered a paralectotype. Both the lectotype of *subcyanea* and the unique type of *obtusa* in the British Museum are larger than but otherwise identical with a specimen from central Panama. The genitalia of all three specimens are also identical.

Cyphothorax Waterhouse, 1887

Cyphothorax gibbicollis (Kerremans), 1897, op. cit., p. 52, **New Combination**.

Examination of the type of this species, originally described in *Amorphosoma* and later transferred to *Diodora*, shows that it belongs in the genus *Cyphothorax*.

Dismorpha Gistel, 1848

Dismorpha Gistel, 1848, Naturgeschichte des Thierreichs fur Hohere Schulen, p.x. Synonym: *Stenogaster* Solier, 1838 Ann. Entomol. Soc. France, 2:305, not *Stenogaster* Guerin-Meneville, 1831, in Duperré, Voyage Coquille, Zoologie, Insectes, Atlas, pl. 9, fig. 9. (Hymenoptera).

Workers on the Buprestidae seem to have overlooked this generic homonymy, first called to my attention by H. E. Evans, and its early correction by Gistel. The genus includes the following species:

Dismorpha costifera (Waterhouse) 1889, op. cit., p. 48.

- Dismorpha diffusa* (Chevrolat) 1837, op. cit., p. 87.
Dismorpha fossulata (Chevrolat) 1835, op. cit., p. 192.
Dismorpha globithorax (Gory) 1841, op. cit., p. 201.
Dismorpha irrorata (LaPorte & Gory) 1839, Monogr. Bupr. II, Stenogaster, p. 3.
Dismorpha juvenca (Gory) 1841, op. cit., p. 202.
Dismorpha linearis (L.) 1758, Syst. Nat., 10th ed., p. 410.
Dismorpha marmorea (Kerremans) 1897, op. cit., p. 48.
Dismorpha morosa (Chevrolat) 1835, op. cit., p. 135.
Dismorpha nubila (Mannerheim) 1837, op. cit., p. 104.
Dismorpha tenuis (Kirsch) 1873, Berliner Entomol. Zeitschr. 17:347.

Geralius Harold, 1869

- Geralius furciventris* Chevrolat, 1837, op. cit., p. 88. Synonym: *Geralius distinctus* Kerremans, 1889, Ann. Entomol. Soc. Belgique, 43:340, **New Synonymy**.
 The types of both Chevrolat's and Kerremans' names are in the British Museum and were compared directly. Kerremans' type is rather rubbed, but agreed in all respects with *furciventris*.

Hylaeogena Obenberger, 1923

- Hylaeogena atroviridis* Fisher, 1922, Proc. U.S. Natl. Mus. 62(8):13. Synonym: *H. jakovlevi* Obenberger, 1925, Sbornik Entomol. Odd. Nár. Mus. Praha 3:144, **New Synonymy**.
 Two cotypes of *jakovlevi* at Prague are identical with a specimen from Panama compared with Fisher's type of *atroviridis* at the U.S. National Museum.
- Hylaeogena hydroporoides* (Waterhouse), 1889, op. cit., p. 140. Synonym: *H. differens* Obenberger, 1925, op. cit., p. 139, **New Synonymy**.
 A male specimen from Guanacaste, Costa Rica, was compared with both the male Lectotype of *hydroporoides* at the British Museum (Hespenheide 1974b) and the male type of *differens* at Prague. Both names refer to the same species.
- Hylaeogena thoracica* (Waterhouse), 1889, op. cit., p. 139. Synonym: *H. hoscheki* Obenberger, 1923, Sbornik Entomol. Odd. Nár. Mus. Praha, 1:43, **New Synonymy**.
 The unique type of *hoscheki* in the Obenberger collection at Prague is identical to a specimen compared with Waterhouse's type at the British Museum.

Because of the relatively recent recognition of the genus *Hylaeogena*, a number of early species originally described in the genus *Pachyschelus* have had to be transferred to *Hylaeogena* (Hespenheide, 1974b). The following additional species belong in *Hylaeogena*:

- Hylaeogena chrysocephala* (Kerremans), 1896, Ann. Entomol. Soc. Belgique 40:322, **New Combination**.
Hylaeogena circularis (Kerremans), 1899, op. cit., p. 354, **New Combination**.
Hylaeogena circumscripta (Kerremans), 1903, op. cit., p. 318, **New Combination**.
Hylaeogena jousselini (Gory), 1841, op. cit., p. 349, **New Combination**.
Hylaeogena laenis (Gory), 1841, loc. cit., **New Combination**. Synonym: *H. analis* Obenberger, 1925, op. cit., p. 145, **New Synonymy**.
 Gory's unique type from "Bresil," in the Oberthur collection at Paris is identical with a specimen compared with Obenberger's type of *analis* at Prague.

- Hylaeogena laticeps* (Waterhouse), 1889, op. cit., p. 149, **New Combination**.
Hylaeogena metallica (Gory), 1841, loc. cit., **New Combination**.
Hylaeogena pauperula (Thomson), 1879, op. cit., p. 81, **New Combination**.
Hylaeogena semilunaris (Kerremans), 1900, op. cit., p. 346, **New Combination**.

Hylaeogena testudinaria (Gory), 1841, op. cit., p. 341, **New Combination.**

Hylaeogena unicolor (Kerremans), 1896, Ann. Soc. Entomol. France 66:28, **New Combination.**

Kerremans' placement of this species in *Leiopleura* is unaccountable, since the flattened tarsi and very different head structure do not agree with any other species in that genus.

Leiopleura Deyrolle, 1864

Leiopleura basalis Waterhouse, 1889, op. cit., p. 158. Synonym: *L. blattnyi* Obenberger, 1922, Arch. f. Naturg., A 88(12):157, **New Synonymy.**

The unique type of both *basalis* (at the British Museum) and *blattnyi* (at Prague) were compared with a very similar and possibly conspecific specimen in my collection from Panama. The two types differ in the same way from the Panama specimen, on the basis of comparative drawings, and are conspecific in any case.

Leiopleura belti Waterhouse, 1897, Biol. Centrali-Americana, Coleoptera, III, 1:666.

Synonym: *L. uhmanni* Obenberger, 1939, op. cit., p. 308, **New Synonymy.**

A specimen in my collection from Turrialba, Costa Rica, was compared with the unique type of *belti* at the British Museum and type material of *uhmanni* at Prague. The two names refer to the same species.

Leiopleura colorata Kerremans, 1899, Ann. Soc. Entomol. Belg. 43:363. Synonym:

L. ornata Obenberger, 1922, op. cit., p. 154, **New Synonymy.**

A specimen from the Panama Canal Zone was compared with the unique types of *colorata* at the British Museum and of *ornata* at Prague. The two names refer to the same species.

Leiopleura divisa Waterhouse, 1889, op. cit., p. 155. Synonym: *L. schwartzi* Fisher, 1922, op. cit., p. 78, **New Synonymy.**

A specimen in my collection has been compared with the unique male types of both *divisa* in the British Museum and *schwartzi* in the U.S. National Museum.

Leiopleura pulchra Waterhouse, 1889, op. cit., p. 156. Synonym: *L. hoscheki* Obenberger, 1922, op. cit., p. 155, **New Synonymy.**

A specimen from the Panama Canal Zone was compared with the unique types of *pulchra* at the British Museum and *hoscheki* at Prague, and found to be identical with both.

Leiopleura viridicollis (Gory), 1841, op. cit., p. 343.

Blackwelder (1944) and Obenberger (1937) list this species under both *Pachyschelus* and *Leiopleura*. Examination of the type in the Oberthur collection at Paris shows it to belong to the latter genus. The specimens cited by Waterhouse (1889) under this name belong to a distinct species.

Leiopleura goryi (Thomson), 1878, op. cit., p. 93, **New Combination.**

Within the genus *Leiopleura* there is a series of species, primarily South American in distribution, that approach the genus *Callimicra* in form, being relatively convex above and narrower in overall body width than most *Leiopleura*. Some species are so intermediate in form that assignment to one genus or the other is somewhat arbitrary in the absence of life history data or a more thorough study of morphology. All typical *Callimicra* appear to be stem borers and have four epistomal pores, whereas *Leiopleura* are leaf miners and may have 3 or 4 epistomal pores. This species and *L. parallela* (Kerremans), below, have only three pores and, moreover, to being narrow toward the elytral apices from about the middle of the elytra, rather than well

beyond the middle, as in typical *Callimicra*. The unique type of *goryi* is in the Oben-thur collection in Paris. The following additional species are transferred from *Callimicra*:

Leiopleura melichari (Obenberger), 1922, op. cit., p. 165, **New Combination**.

Leiopleura melichari var. *ornaticollis* (Obenberger), 1922, loc. cit., **New Combination**.

Leiopleura parallela (Kerremans), 1899, op. cit., p. 366, **New Combination**.

Leiopleura plagiodorsus (Obenberger), 1932, Sbornik Entomol. Odd. Nár. Mus. Praha 10:148, **New Combination**. Synonym: *L. plagiodorsus* var. *splendidifrons* (Obenberger), 1932, loc. cit., **New Synonymy**.

As for many other *Leiopleura*, this species is sexually dimorphic, with the males' having a bright green front and lateral margins to the thorax and the females' having the same areas dully colored. In this case the female is the nominate form, the male the "variety." There is no need for different names for the sexes.

Leiopleura semenovi (Obenberger), 1932, op. cit., p. 147, **New Combination**.

Lius Deyrolle, 1864

Lius castor E. Saunders, 1876, Entomol. Monthly Mag. 13:48. Synonym: *L. striatus* Kerremans, 1897, op. cit., p. 138, **New Synonymy**.

The two syntypes of *striatus*, both labelled "Jatahy, Pujol," were compared directly with the unique type of *castor*, all at the British Museum. The three are identical.

Lius pollux E. Saunders, 1876, op. cit., p. 48. Synonym: *L. pilosellus* Kerremans, 1899, op. cit., p. 361, **New Synonymy**.

The two unique types, both at the British Museum, were compared directly.

Lius tucumanus Kerremans, 1887, Comptes Rend. Soc. Entomol. Belgique, 1887:7. Synonym: *L. violaceus* Kerremans, 1897, op. cit., p. 139, **New Synonymy**.

A series of six syntypes of *violaceus*, all with the label "Jatahy, Pujol," was compared directly with the unique type of *tucumanus*. The latter specimen is slightly larger and very dirty, but otherwise identical. All specimens are in the British Museum.

Neotrachys Obenberger, 1923

Obenberger described the genus *Neotrachys* after several species of New World leaf-mining Buprestidae had been described in the genus *Trachys*. Examination of the types of these names shows they all belong to *Neotrachys*. The following species are involved:

Neotrachys amazonica (Kerremans), 1896, op. cit., p. 26.

Neotrachys boliviana (Kerremans), 1897, op. cit., p. 126.

Neotrachys concinna (Fisher), 1922, op. cit., p. 4.

Neotrachys cyanipennis (Fisher), 1922, loc. cit. Synonym: *N. panamaensis* (Fisher), 1924, Proc. Biol. Soc. Washington. 25:190 (new name for *Trachys cyanipennis* Fisher, 1922, not *T. cyanipennis* Fisher, 1921, Philippine J. Sci. 18:429).

Neotrachys estebana (Kerremans), 1896, op. cit., p. 26.

Neotrachys segregata (Waterhouse), 1889, op. cit., p. 131.

Omochyseus Waterhouse, 1887

Omochyseus omocyrius Thomson, 1897, op. cit., p. 58. Synonym: *O. pici* Théry, 1897, Ann. Soc. Entomol. France 66:365, **New Synonymy**.

The types of both species are at Paris and both are from Columbia. Direct comparison of the types shows they refer to the same species.

Pachyschelus Solier, 1833

Pachyschelus bifasciatus Waterhouse, 1889, op. cit., p. 151. Synonyms: *P. cuneiformis* Fisher, 1922, op. cit., p. 21, **New Synonymy**; *P. fibichi* Obenberger, 1925, op. cit., p. 117, **New Synonymy**; *P. fibichi* var. *syrovatkai* Obenberger, 1925, op. cit., p. 63, **New Synonymy**.

A specimen reared in Panama from *Terminalia* has been compared with the types of *bifasciatus* at the British Museum (Hespenheide 1974b, q.v. for additional synonymy), of *cuneiformis* at the U.S. National Museum, and *fibichi* and *fibichi* var. *syrovatkai* at Prague. All of these names refer to the same, distinctive species.

Pachyschelus biguttatus Waterhouse, 1889, op. cit., p. 153. Synonym: *P. adonis* Obenberger, 1925, op. cit., p. 122, **New Synonymy**.

A specimen from Panama was compared both with the type material of *biguttatus* (Hespenheide 1974b) and the two female types of *adonis* at Prague. The two names refer to the same species.

Pachyschelus collaris La Porte & Gory, 1840, op. cit., p. 7. Synonyms: *P. octodentatus* Waterhouse, 1889, op. cit., p. 142, **New Synonymy**; *P. turrialbae* Obenberger, 1925, op. cit., p. 107, **New Synonymy**.

A male-female pair from the Panama Canal Zone was compared with the types of *collaris* at Paris, the types of *octodentatus* at the British Museum (Hespenheide 1974b), and the unique male type of *turrialbae* at Prague.

Pachyschelus collaris robustus Waterhouse, 1889, op. cit., p. 141, **New Combination**. Synonym: *P. sekerae* Obenberger, 1925, op. cit., p. 106, **New Synonymy**.

The synonymization of *octodentatus* requires a change in status for *robustus* (Hespenheide 1974b). Comparison of a pair of specimens from Chiapas, Mexico, with the types of *robustus* at the British Museum and *sekerae* at Prague shows them to refer to the same form.

Pachyschelus communis Waterhouse, 1889, op. cit., p. 141. Synonyms: *P. montezumae* Obenberger, 1925, op. cit., p. 103, **New Synonymy**; *P. subcommunis* Obenberger, 1925, op. cit., p. 105, **New Synonymy**.

A male-female pair from Panama and Costa Rica that was compared with the types of *communis* at the British Museum (Hespenheide 1974b; q.v. for additional synonymy) was compared with the male type of *subcommunis* and the female type of *montezumae* at Prague.

Pachyschelus dubius Waterhouse, 1889, op. cit., p. 143. Synonym: *P. velasco* Obenberger, 1925, op. cit., p. 89, **New Synonymy**.

A female Paralectotype (Hespenheide 1974b) on loan from the British Museum was compared directly to the unique female type of *velasco* at Prague. The two names belong to the same species.

Pachyschelus irroratus Waterhouse, 1889, op. cit., p. 149. Synonyms: *P. aztecus* Obenberger, 1925, op. cit., p. 127, **New Synonymy**; *P. olivaceus* Kerremans, 1896, Ann. Soc. Entomol. Belgique 40:138, **New Synonymy**.

A male-female pair from the Canadian National Collection and collected at the type locality of Mazatlan, Sinoloa, Mexico, was compared with the types of *irroratus* (Hespenheide 1974b) and the unique male type of *aztecus*. The two names refer to the same species. The unique female type of *olivaceus* is also at the British Museum and is labelled "Chili, Chevrol." The label is almost certainly in error and appears to be a relabelling of Kerremans. *P. irroratus* is very distinctive within the genus, and *olivaceus* is identical with the types of that name. No other *Pachyschelus* are known from Chile.

Pachyschelus pubicollis Waterhouse, 1899, op. cit., p. 153. Synonym: *P. burmeisteri* Obenberger, 1925, op. cit., p. 123, **New Synonymy**.

A male from Panama and a female from Costa Rica, both in my collection, were compared with the types of *pubicollis* at the British Museum (Hespenheide 1974b) and the unique type of *burmeisteri* at Prague and found to represent the same species.

Pachyschelus pupureipennis Waterhouse, 1889, op. cit., p. 144. Synonyms: *P. heterochrous* Obenberger, 1925, op. cit., p. 33, **New Synonymy**; *P. vismiae* Obenberger, 1939, op. cit., p. 311, **New Synonymy**.

A female paratype of *pupureipennis* borrowed from the British Museum was compared directly with the types of *heterochrous* and *vismiae* at Prague. The three names refer to the same species.

Pachyschelus purpureus bicolor Kerremans, 1894, Ann. Entomol. Soc. France 63:420. Synonyms: *P. ianthinus* Obenberger, 1925, op. cit., p. 124, **New Synonymy**; *P. purpureiformis* Obenberger, 1925, loc. cit., **New Synonymy**; *P. auberti* Théry, 1927, Ann. Soc. Entomol. Belgique 67:47, **New Synonymy**.

A male-female pair from Costa Rica was compared with the unique female type of *bicolor* at the British Museum (see Hespenheide 1974b for discussion of nomenclatural status), the female types of *ianthinus* and the male type of *purpureiformis* at Prague, and the male-female pair of types of *auberti* at Paris. These names refer to the same species.

Pachyschelus secedens Waterhouse, 1889, op. cit., p. 145. Synonym: *P. dugesi* Théry, 1923, Ann. Mus. Sci. Stor. Nat. Genova 51:113, **New Synonymy**; *P. oculus* Schaeffer, 1909, Bull. Brooklyn Inst. Mus. 1(15):377, **New Synonymy**.

A male-female pair from Durango and Michoacan, Mexico, borrowed from the Canadian National Collection, was compared with the types of *secedens* in the British Museum (Hespenheide 1974b; q.v. for additional synonymy) and the male and female type material of *dugesi* at Paris. *P. secedens* is negligibly different from Arizona populations under the name of *P. oculus*. *P. oculus* (= *secedens*) appears to be distinct from *P. schwarzi* Kerremans, and not a "variety" of it as treated by Obenberger. (1937).

Pachyschelus signatus Waterhouse, 1889, op. cit., p. 150. Synonyms: *P. schmidti* Obenberger, 1939, op. cit., p. 303, **New Synonymy**; *P. schmidti* var. *sericeonotatus* Obenberger, 1939, op. cit., p. 310, **New Synonymy**.

A male from Chiapas, Mexico, and a female from Costa Rica were compared with the types of *signatus* (Hespenheide 1974b) at the British Museum, the male-female types of *schmidti* and the unique type of *schmidti* var. *sericeonotatus*, at Prague. The three names refer to the same species.

Pachyschelus unifasciatus Fisher, 1922, op. cit., p. 28. Synonym: *P. veselyi* Obenberger, 1925, op. cit., p. 125, **New Synonymy**.

A male-female pair from the Panama Canal Zone was compared with the male type of *unifasciatus* at the U.S. National Museum and the unique female type of *veselyi* at Prague. Both names refer to the same species.

Pachyschelus undulatus Waterhouse, 1889, op. cit., p. 151. Synonym: *P. samali* Obenberger, 1934, Acta Soc. Entomol. Csl. Prague 31:90 (*P. famulus* Obenberger, 1925, op. cit., p. 116, not *P. famulus* Kerremans, 1899, op. cit., p. 359), **New Synonymy**.

A male specimen from the Panama Canal Zone was compared with the lectoallotype of *undulatus* at the British Museum (Hespenheide 1974b) and the unique male type of *samali* at Prague.

Paragrilus Saunders, 1871

Paragrilus aeraticollis Waterhouse, 1889, op. cit., p. 127. Synonyms: *P. costaricensis* Obenberger, 1919, Entomol. Mitteil. 8:21, **New Synonymy**; *P. costaricensis* var. *hoscheki* Obenberger, 1924, Archiv. f. Naturg. 90, Abt. A, Heft 3, p. 149, **New Synonymy**.

At the British Museum there are 11 specimens which qualify as types of *aeraticollis*. A pair of specimens with the label "Teapa, Tabasco, Feb. H.H.S." bears the additional label "*Paragrilus aeraticollis* (Type) Waterhouse;" of these two the male is designated the Lectotype and the female the Lectoallotype. Paratypes bear the same label or one of the following: "Teapa, Mexico, Salle Coll.," "Taboga Isl., Panama, Champion." "David, Chiriqui, Champion," "Bugaba, Panama, Champion," and "Rio Hondo, Br. Honduras, Blancaneau." A specimen in my collection from San Pedro, Costa Rica, compared with the type material of *aeraticollis* and of *costaricensis* and *costaricensis* var. *hoscheki* at Prague shows the names to refer to the same species. *P. costaricensis* var. *pehlkei* Obenberger (1924, loc. cit.) was described from Colombia and may warrant subspecific status, but more material is needed. This species is relatively common on the plant *Byttneria* and rather variable, especially in size.

Paragrilus impressus (Chevrolat), 1835, op. cit., p. 145.

This species is listed by both Obenberger (1935, 1936) and Blackwelder (1944) under both *Agrilus* and *Paragrilus*; it is a member of only the latter genus.

Paragrilus lesueuri Waterhouse, 1889, op. cit., p. 126. Synonyms: *P. aureonitens* Obenberger, 1919, op. cit., p. 22, **New Synonymy**; *P. helferi* Obenberger, 1924, op. cit., p. 147, **New Synonymy**; *P. helferi* var. *cortezi* Obenberger, 1924, loc. cit. **New Synonymy**.

Of 22 specimens in the British Museum that may be considered types of *lesueuri*, 9 specimens on 9 pins bear the label "Jalapa, Mexico, Hoege;" one female of these bears the additional label "*Paragrilus lesueuri* (Type) Waterh." and is designated the Lectotype. A male of this series is designated the Allo-Lectotype. Paratypes include the others of this series and specimens from Cordova, Teapa, Puebla, Tuxtla, Yolos, Jacale, Temax, Atoyac, La Venta, and Tepetlapa. Specimens in my collection from Guatemala and Costa Rica were compared with the types of *lesueuri*, *aureonitens*, *helferi*, and *helferi* var. *cortezi*, all of the last three at Prague. *P. lesueuri* is a widespread and variable species whose hosts are species of *Sida* in the Malvaceae. The color varies from bright golden cupreous to metallic violet, occasionally within the same population (Guanacaste Prov., Costa Rica). Obenberger's names reflect this range of variation within the species.

Paragrilus modicus Solier, 1833, Ann. Soc. Entomol. France 2:304. Synonyms: *P. vicinus* Waterhouse, 1889, op. cit., p. 126, **New Synonymy**; *P. vavrai* Obenberger, 1924, op. cit., p. 150, **New Synonymy**.

P. modicus is represented in the Gory collection at Paris by a specimen bearing the label "*modicus* Solier, Columbia, Typ. Gory" which is here considered the type. *P. vicinus* is represented by 10 specimens in the British Museum which can be considered type material; a female with the labels "V. de Chiriqui, 25-4000 ft., Champion" and "*Paragrilus vicinus* (Type) Waterhouse" is designated the Lectotype. A male with the same label, except the altitude range is "3-4000 ft.," is designated the Allolectotype. Other specimens with these labels or with the altitude given as "below 4000 ft." are considered paratypes. A male specimen from the Panama Canal Zone was compared with the type material of these two species, as well as of *vavrai* at Prague. The three names refer to the same form.

Paragrilus percautus Kerremans, 1903, op. cit., p. 271, **New Combination**.

Although described as an *Agrilus*, examination of the type in the British Museum shows it to be a species of *Paragrilus*. The specimen carries a blue "Syntype" label,

but there is presently only a single specimen under that name with the label "Rep. Argentina Prov. Buenos Aires, 4.ii.1898, C. Bruch."

Paragrilus rugatulus Thomson, 1879, op. cit., p. 74. Synonym: *P. texanus* Schaeffer, 1904, J. New York Entomol. Soc. 12:211, **New Synonymy**.

The type of *rugatulus* is at Paris and is labelled "Mex." and "*rugatulus* Deyr., Mexique." It is identical with a specimen from Starr County, Texas, collected and determined by G. H. Nelson as *texanus*.

Paragrilus tenuis Le Conte, 1863, Smithsonian Misc. Coll., 6(1):82. Synonym: *P. tenuis* subsp. *lecontei* Obenberger, 1924, op. cit., p. 149, **New Synonymy**.

The type of the "subspecies" *lecontei* is a color variety from among a series of specimens with the same locality label, and therefore not a subspecific difference in the current sense of the word; i.e., a morphologically recognizable population that can be geographically delimited. This name should not be recognized without a systematic study of the variation within the species.

Paragrilus transitorius Waterhouse, 1889, op. cit., p. 126. Synonyms: *P. cordai* Obenberger, 1924, op. cit., p. 150, **New Synonymy**; *P. modicus* subsp. *hansi* Obenberger, 1924, op. cit., p. 151, **New Synonymy**; *P. modicus* subsp. *vimmeri* Obenberger, 1924, op. cit., p. 152, **New Synonymy**.

There are 21 specimens in the British Museum that qualify as types of *transitorius*. A pair of females on a card carries the labels "Teapa, Tabasco, March, H.H.S." and "*Paragrilus transitorius* (Type) Waterh." One of these is arbitrarily designated the Lectotype. A male from the same series is designated the Allolectotype. Paratypes bear the same labels or labels from Cordova or Tapachula, Mexico; Zapote, San Juan, or San Geromino, Guatemala; or Bugaba, Panama. A male from the Osa Peninsula, Costa Rica, in my collection was compared with the type material of *transitorius* and of Obenberger's *cordai*, *modicus* subsp. *hansi* and *modicus* subsp. *vimmeri* at Prague. These specimens vary in the distinctness and width of the sulcus between the eyes, but all represent the same species whose host is also *Sida* in the Malvaceae.

Sambomorpha Obenberger, 1924

Sambomorpha aeneifrons (Kerremans), 1896, Ann. Soc. Entomol. France 66:163.

Examination of the type of the genus *Sambomorpha* and of Kerremans' *Agrilus aeneifrons* shows the latter to be a member of Obenberger's genus.

Taphrocerus Solier, 1833

Taphrocerus agriloides Crotch, 1873, Proc. Acad. Nat. Sci., Philadelphia 25:96. Synonym: *T. texanus* Kerremans, 1896, Ann. Soc. Entomol. Belgique 40:312, **New Synonymy**.

Although considered a synonym of *gracilis* (Say) by Obenberger (1937), examination of the unique type of *texanus* at the British Museum shows it to be a synonym of *T. agriloides*.

Taphrocerus chevrolati Obenberger, 1924, Sbornik Entomol. Odd. Nár. Mus. Praha 2:71. Synonym: *T. huachucanus* Knull, 1944, Ohio J. Science 44:90, **New Synonymy**.

A specimen in my collection from Portal, Arizona, determined as *huachucanus* was compared with the type of *chevrolati* in Prague and found to be conspecific.

Taphrocerus communis Waterhouse, 1889, op. cit., p. 130. Synonyms: *T. melanocephalus* Obenberger, 1941, Sbornik Ent. Odd. Nár. Mus., Praha 19:97, **New Synonymy**; *T. san-josei* Obenberger, 1941, op. cit., p. 96, **New Synonymy**; *T. sekerai* Obenberger, 1924, op. cit., p. 62, **New Synonymy**; *T. schmidtii* Obenberger, 1941, loc. cit.,

New Synonymy; *T. schmidtii* Obenberger, 1941, loc. cit., **New Synonymy;** *T. srogli* Obenberger, 1924, op. cit., p. 59, **New Synonymy;** *T. uniformis* Waterhouse, 1889, loc. cit., **New Synonymy.**

A male specimen in the Ohio State University collection from Acapulco, Mexico, was compared with the male types of *communis*, *san-josei*, *sekerai*, and *schmidtii*, and with the unique female types of *malanochalceus* and *srogli*. Comparisons of genitalia were made in all cases involving males. Although *communis* is in a difficult section of the genus, all these names refer, in my judgment, to the same species. Waterhouse' *uniformis* is somewhat larger, with the thorax not so distinctly different in color from the elytra, but otherwise also apparently the same species.

Taphrocerus cylindricollis Kerremans, 1896, op. cit., p. 312. Synonym: *T. albonotatus* Blatchley, 1919, Can. Entomol. 51:29, **New Synonymy.**

Although *cylindricollis* has been considered by recent workers to be a synonym of *gracilis* (Say), examination of the type at the British Museum, and comparison of the type with material of *albonotatus* from Blatchley's collections there, shows that *cylindricollis* is a senior synonym of *albonotatus*. Although the type of *cylindricollis* is from Philadelphia, Pennsylvania, and that of *albonotatus* is from Florida, Nelson and Westcott (1976) have recently reported this species (as *albonotatus*) from New Jersey.

Taphrocerus depilis Kerremans, 1896, op. cit., p. 311. Synonym: *T. brevicarinatus* Fisher, 1929, Proc. U.S. Natl. Mus. 76(6):17, **New Synonymy.**

Comparison of a specimen of the distinctive *brevicarinatus* from Panama with the unique type of *depilis* at the British Museum shows the two names refer to the same species.

Taphrocerus difficilis Obenberger, 1924, op. cit., p. 57. Synonym: *T. sinaloensis* Obenberger, 1934, Sbornik Entomol. Odd. Nár. Mus., Praha, 12:55, **New Synonymy.**

Types of these two names at Prague were compared directly; except for slight differences in size, they are identical.

Taphrocerus fasciatus Waterhouse, 1889, op. cit., p. 128. Synonym: *T. vavrai* Obenberger, 1924, op. cit., p. 50, **New Synonymy.**

A specimen from the Panama Canal Zone was compared with both types. The type of *vavrai* at Prague is a female and lacks the pubescence on the lower half of the face, a sexual characteristic of the males.

Taphrocerus gracilis Say, 1825, Ann. Lyc. Nat. Hist., N.Y. I, 2:253. Synonym: *T. grossus*, Obenberger, 1924, op. cit., p. 56, **New Synonymy.**

Obenberger described *grossus* from a poorly labelled specimen ("Amerique meridionale") that he guessed might have come from Brasil. Examination of the type shows, however, that it is a somewhat dirty, rubbed specimen of *gracilis* that was mislabelled, for *gracilis* does not occur south of the United States.

Taphrocerus psilopteroides Waterhouse, 1889, op. cit., p. 129. Synonyms: *T. capitatus* Obenberger, 1924, op. cit., p. 55, **New Synonymy;** *T. schildi* Obenberger, 1924, loc. cit., **New Synonymy.**

Three specimens in the British Museum can be considered type material of *psilopteroides*. The specimen labelled "Chiacaman, Vera Paz. Champion" and "*Taphrocerus psilopteroides* (Type) Waterh." is here designated as the Lectotype; specimens from Cuernavaca and Taboga Island, Panama, are considered paratypes. A specimen from Costa Rica in my collection was compared with the type of *psilopteroides*, as well as the types of *capitatus* and *schildi*, both from Costa Rica and at Prague. It appears that *psilopteroides* is a relatively widespread and variable species. The pubescent design on the elytra varies in intensity, and individuals from the same pop-

ulation can vary in size and shape, based on my field observations, but there are no correlated differences in the male genitalia. Both *capitatus* and *schildi* fall within the range of variation shown by *psilopteroides* and are considered conspecific. It is likely that additional names will be considered synonyms when a complete study of variation in this species is made.

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